with this species. Nevertheless I see no reason for doubting Lesquereux's determination beyond the fact that he queried it. The present occurrence is based upon characteristic nuts collected by Mr. Wade at Adamsville.

Celtis mississippiensis Bosc.

This species, so far as I know, has not previously been found fossil. The present occurrence is based upon beautifully preserved, reticulate surfaced stones collected from the Loess at Vicksburg, Mississippi, by E. W. Shaw at a horizon 10 feet below the surface. The related *Celtis occidentalis* Linné is represented by stones in the late Pleistocene (Talbot formation) at Tappahannock, Virginia.<sup>1</sup>

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## NOTES ON LYCASTE

#### BY T. D. A. COCKERELL

Among the various neotropical orchids, few are more attractive than the species of Lycaste. Several years ago Mrs. Cockerell brought three forms from Guatemala, and we have had abundant opportunity to study their characters, as they flowered each season in the greenhouse. The plants were purchased in Guatemala City, but were brought from the surrounding country by the natives. The most interesting and beautiful is the. one known in horticulture as Lycaste Skinneri var. alba. After comparing the living plants with typical L. Skinneri, flowering at the same time, I came to the conclusion that the so-called variety alba was a distinct species. It apparently occurs wild, and in spite of assertions to the contrary, it certainly has structural as well as color characters. The lateral lobes of the lower petal or lip are much larger in Skinneri than in alba; while the bract of *Skinneri* is much shorter, not reaching the middle of the upper sepal. I wrote to Mr. R. A. Rolfe concerning the matter, and he discussed the question briefly in Orchid Review, 1915, p. 224. He did not believe that *alba* could be a distinct species, and I

<sup>1</sup> Berry, E. W. Am. Nat. 43: 435. 1909.

hesitated to combat his opinion, although he presented no de cisive evidence. As no more light has come to clear up the matter, and it still seems to me at least probable that the white form should be separated, I offer a brief description from our material.

#### LYCASTE alba sp. nov.

Scapes light green, 4.25 mm. thick; posterior bract sheathing, the sides infolding, so that the long apical part is hollow, apex tapering, sharply pointed, base 10.5 mm. wide, the back very obtusely keeled, length of bract about 72 mm., light green; anterior bract represented by a small projection about 2 mm. long, pointed with a membranous appendage; sepals pure white, upper erect, about 75 mm, long and 36 broad, lanceolate ovate, obtusely pointed, keeled beneath apically; lateral sepals similar, faintly greenish apically beneath, about 77 mm. long and 38 broad, meeting below and slightly overlapping to form a gibbous chin; the upper sepal goes 24 mm. beyond tip of bract; petals pure white, the lower one (lip) suffused with orange at extreme base; lateral petals about 50 mm. long and 30 broad, the broad apices curled over backward; lip with a broad downwardly directed median lobe, lateral lobes hardly developed, basal part bulbous; column with anthers about 28 mm. long, very stout, the rounded apex very faintly suffused with purplish; the four pollinia bright orange, on a clear white stalk; callus of lip very thick, about 7.5 mm. broad, suboval, pale orange tinted. The flowers are not s'icky or aromatic.

In addition to the above and the true L. Skinneri Lindley, we have Lycaste cruenta Lindley, belonging certainly to a distinct section of the genus. The sepals are very sticky on the outer side, and the flowers have a strong aromatic odor. It is also peculiar in that one of each pair of pollinia is about a third smaller than the other. The following description of the flower is from life:

### LYCASTE CRUENTA Lindley

Scapes about 14 cm. long; bracts 4–5, dark red brown, sheathing, loose, pointed, uppermost about 22 mm. long; flowers erect, about 40 mm. long, brilliant orange, with the broad sepals pale yellow-green; sepals about 50 mm. long and 24 broad, oblong, rather obtusely pointed, bearded at base within; petals shorter than sepals, more ovate, with a larger apical angle, lightly speckled with crimson at base; lip abundantly spotted with crimson within, but the extended, downwardly curved median lobe not speckled, its apical margin slightly irregularly crenulate but not fimbriate; column about 16 mm. long and 7.5 broad, flattened, but thick, dark crimson at base, the contiguous part of the lip also crimson, and the at base of the lip on the outer side is a transversely elongate crimson patch.

# SHORTER NOTES

PLANTS IN FLOWER IN THE AUTUMN OF 1918 ON LONG ISLAND, N. Y.—Weather Bureau records confirm the observations of everyone that October was the warmest ever known in this vicinity. Certain days of almost summer heat were warmer than any October day for as far back as the records go. It is probably due to these unseasonably warm October days that the following list of plants in fresh flower on October 28–30, and November 1–2, can be recorded.

PLANTS IN FRESH BLOOM AT GARDEN CITY, L. I., ON OCTOBER 28-30, 1918:

Trifolium pratense	Solidago juncea
" repens	Brassica sp.
" arvense	Daucús carota
Linaria Linaria	Melilotus alba
Taraxacum Taraxacum	Achillea millefolium
Aster paniculatus	Chrysanthemum Leucanthemum
" dumosus	Neopieris mariana (Nov. 4)
" ericoides	Baptisia tinctoria (Nov. 4)

During a walk from Pine Lawn to Lake Ronkonkoma on November 1-2, with Mr. Norman Taylor, the following were also found in fresh bloom:

Aster	ericoides	Houstonia longifolia
66	undulatus	Cichorium Intybus
6.6	divaricatus	Taraxacum Taraxacum
6 6	cordifolius	Prunella vulgaris
4.4	novae-angliae	Daucus carota
6.6	lateriflorus	Achillea millefolium
6.6	patens	Chrysopsis mariana
4.4	vimineus	Linaria Linaria
4.4	Tradescanti	Oenothera biennis